

REMARKS

Claims 7-10, 13, 14, and 23-26 were rejected under 35 USC 103(a) over Siol (US5,380,797). The rejection is traversed for the following reasons.

Siol discloses, as the examiner noted, polymer blends containing at least two two-phase or multiphase polymers P1 and P2, which in turn contain at least one *toughening phase* A1 or A2 and at least one *hardness phase* B1 or B2. B1 and B2 differ in chemical structure and are thermodynamically compatible with one another.

In column 3 (column 3, lines 10-29), Siol discloses that the polymer blends are made up of two two-phase or multiphase polymers P1 and P2. P1 and P2 each contain (a) at least one optionally crosslinked toughening phase (i.e., elastomer) A1 and A2, respectively, which is at least partially covalently bonded to (b) at least one thermoplastic hard phase (matrix polymer) B1 or B2. The toughening phases A1 and A2 are usually called rubbers or elastomers and by definition are *polymers A*. The polymers A are preferably chosen from the group of polyolefins, polydienes, *polyacrylates*, ethylene-vinyl acetate copolymers, and polysiloxanes (*emphases applicants'*).

Siol discloses how polyacrylate is produced, column 4, line 51, to column 5, line 42. There, Siol discloses that the *polyacrylates* are preferably prepared by polymerization in aqueous emulsion, optionally in suspension (column 5, lines 50-61).

Siol continues to disclose, column 5, lines 11-37, encompassing lines 13-37 cited by the examiner, that emulsion polymerization is carried out . . . with the use of . . . also possible to use water-soluble azo compounds or organic peroxides as well as inorganic peroxides, such as potassium peroxydisulfate, or redox systems such as peroxydisulfate/bisulfite, as polymerization initiators. . . [t]hese polyacrylate elastomers usually also contain crosslinking monomers . . . preferably . . . (meth)acrylic esters of diols and polyols (such as *ethylene glycol dimethacrylate*, . . .) (*italics examiner's and underline applicants'*).

That is, the *peroxides* noted by the examiner are for initiation of polymerization for producing a polyacrylate, which, among others, is referred to as toughening phase A1 or A2 in Siol (see above-discussion).

When crosslinkable monomers are present, the polyacrylates are crosslinked. Once a polyacrylate is crosslinked, the polyacrylate becomes a toughness polymer, i.e., crosslinked rubber, which can no longer be crosslinked to another polymer such as polyester, noted by the examiner.

Application No. 10/674,305
Docket No. AD6918 US NA

In Siol, the toughening A1 or A2, such as a crosslinked polyacrylate illustrated above, is then *covalently bonded* to a portion of the hardness phase (column 6, lines 5-11) by *grating* (column 6, line 8).

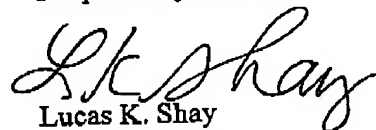
That is, Siol discloses that a *crosslinked* polyacrylate is *covalently bonded* to a polyalkylene terephthalate by *grafting*.

In other words, in Siol, the polymer blends no longer comprise peroxide or diene because the peroxide is used as polymerization initiator for producing polyacrylate and the diene is used as crosslinking agent to crosslink the polyacrylate.

To the contrary, amended claim 7 calls for a composition comprising (a) from 15 to 60 weight percent of a polyalkylene phthalate polyester polymer or copolymer continuous phase; (b) from 40 to 85 weight percent of a poly(meth)acrylate vulcanizate rubber or polyethylene/(meth)acrylate rubber disperse phase; and in combination with (c) a peroxide free-radical initiator and an organic diene co-agent.

As discussed above, Siol does not disclose the presence of a peroxide free-radical initiator and an organic diene co-agent in polymer blends. Therefore, Siol cannot render claims 7-10, 13, 14, and 23-26 obvious.

Respectfully submitted,



Lucas K. Shay
Attorney for Applicants
Registration No.: 34,724
Telephone: (302) 992-6154
Facsimile: (302) 992-3257

Dated: February 8, 2006